A review of the current status of siRNA nanomedicines in the treatment of cancer.

Submitted by Laurent Lemaire on Thu, 01/08/2015 - 10:15

Titre	A review of the current status of siRNA nanomedicines in the treatment of cancer.
Type de publication	Article de revue
Auteur	Resnier, Pauline [1], Montier, Tristan [2], Mathieu, Véronique [3], Benoît, Jean-Pierre [4], Passirani-Malleret, Catherine [5]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2013
Langue	Anglais
Date	2013 Sep
Numéro	27
Pagination	6429-43
Volume	34
Titre de la revue	Biomaterials
ISSN	0142-9612
Mots-clés	Animals [6], Drug Delivery Systems [7], Genetic Therapy [8], Humans [9], Neoplasms [10], RNA Interference [11], RNA, Small Interfering [12]
Résumé en anglais	RNA interference currently offers new opportunities for gene therapy by the specific extinction of targeted gene(s) in cancer diseases. However, the main challenge for nucleic acid delivery still remains its efficacy through intravenous administration. Over the last decade, many delivery systems have been developed and optimized to encapsulate siRNA and to specifically promote their delivery into tumor cells and improve their pharmacokinetics for anti-cancer purposes. This review aims to sum up the potential targets in numerous pathways and the properties of recently optimized siRNA synthetic nanomedicines with their preclinical applications and efficacy. Future perspectives in cancer treatment are discussed including promising concomitant treatment with chemotherapies or other siRNA. The outcomes in human clinical trials are also presented.
URL de la notice	http://okina.univ-angers.fr/publications/ua6671 [13]
DOI	10.1016/j.biomaterials.2013.04.060 [14]
Lien vers le document	http://dx.doi.org/10.1016/j.biomaterials.2013.04.060 [14]
Autre titre	Biomaterials
Identifiant (ID) PubMed	23727262 [15]

Liens

[1] http://okina.univ-angers.fr/p.resnier/publications
[2] http://okina.univ-angers.fr/publications?f[author]=8216
[3] http://okina.univ-angers.fr/publications?f[author]=10491
[4] http://okina.univ-angers.fr/j.benoit/publications
[5] http://okina.univ-angers.fr/c.passirani/publications
[6] http://okina.univ-angers.fr/publications?f[keyword]=964
[7] http://okina.univ-angers.fr/publications?f[keyword]=7832
[8] http://okina.univ-angers.fr/publications?f[keyword]=10432
[9] http://okina.univ-angers.fr/publications?f[keyword]=991
[10] http://okina.univ-angers.fr/publications?f[keyword]=1484
[11] http://okina.univ-angers.fr/publications?f[keyword]=10783
[12] http://okina.univ-angers.fr/publications?f[keyword]=10781
[13] http://okina.univ-angers.fr/publications/ua6671
[14] http://dx.doi.org/10.1016/j.biomaterials.2013.04.060
[15] http://www.ncbi.nlm.nih.gov/pubmed/23727262?dopt=Abstract